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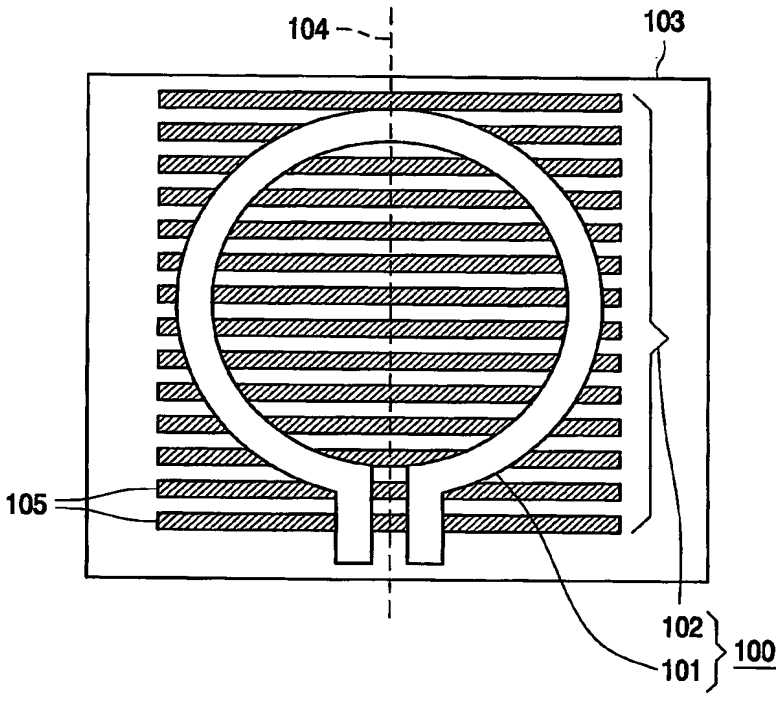
(54) Title: A PLANAR INDUCTIVE COMPONENT AND AN INTEGRATED CIRCUIT COMPRISING A PLANAR INDUCTIVE COMPONENT



(57) Abstract: The invention relates to a planar inductive component arranged over a substrate (103). The substrate comprises a winding (101) situated in a first plane, a patterned ground shield (102), for shielding the winding (101) from the substrate (103). The winding (101) is at least substantially symmetrical with respect to a mirror plane (104) perpendicular to the first plane. The patterned ground shield (102) comprises a plurality of electrical conductive first tracks (105) situated in a first ground shield plane in parallel with the first plane. The first tracks have an orientation perpendicular to the mirror plane (104). Without the patterned ground shield (102) the winding (101) is capacitively coupled to the substrate (103). The substrate resistance results in a degradation of the quality factor of the inductive component (100). The patterned ground shield (102) shields the winding (101) from the substrate (103), thereby eliminating the degrading effect of the substrate. To prevent a reduction in the effective self inductance of the planar inductive component loop currents have to be prevented in the patterned ground shield, while at the same time transfer of charges induced in the mirrored halves of the winding (100) have to be facilitated. This is achieved by the first tracks (105).

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